REMARKS

The Office Action dated June 4, 2003 has been received and carefully studied.

The Examiner objects to claims 8 and 11 as failing to further limit the subject matter of a previous claim.

The objection is respectfully traversed.

Claims 8 and 11 recite a further step, namely, spray application, in the method recited in the claims on which they depend. Accordingly, these claims clearly further limit the subject matter of a previous claim.

The Examiner rejects claim 12 under 35 U.S.C. §102(b) as being anticipated by Chao, U.S. Patent No. 5,109,030. The Examiner states that Chao teaches a foamed hydraulic composition comprising a copolymeric foam stabilizer, and teaches that the prior art used PVA as a foam stabilizer.

By the accompanying amendment, claim 12 has been amended to recite a fireproofing slurry composition. The amendment makes it clear that it is the slurry composition that provides a settable foam capable of spray application, as claim 12 now expressly recites that the slurry composition (which comprises the hydraulic binder, a foam stabilizing agent and a set retarder), when mixed with water and gas, provides a settable foam capable of spray application. Thus, this entire slurry composition, when mixed with water and gas, provides the settable foam.

In contrast, Chao discloses making a foam by mixing a first component that is a foamed mixture with a second component that is a hydraulic slurry. That is, Chao first forms a prefoam component, which is a foamed mixture of water, the foam stabilizer, and preferably a foaming agent. A second component is a hydraulic slurry, that contains water, a water reducer, and one or more hydraulic substances. The first component foamed mixture is then thoroughly mixed with the second

component hydraulic slurry to form the final composition. Chao thus does not disclose or suggest mixing a slurry composition comprising hydraulic binder, a foam stabilizing agent and a set retarder with water and gas to form a settable foam as required by claim 12.

The Examiner rejects claims 1-6 under 35 U.S.C. §103(a) as being unpatentable over Chao in view of SU 1743887, and claims 7-11 as being unpatentable over Chao in view of SU 1743887 and further in view of Nebesnak. The Examiner admits that Chao fails to teach the claimed method of making the foam, but cites SU '887 as teaching a method of preparing foam wherein compressed air and the foaming solution are fed from two different hoses to a vortex generating sleeve wherein the sleeve creates turbulent flow conditions to produce foam. The Examiner concludes that it would have been obvious to have foamed the Chao composition using the SU '887 method. Nebesnak is cited for its disclosure that aluminum sulfate and calcium chloride are equivalents.

The rejections are respectfully traversed.

Instant claims 1-6 recite a method of producing a hydraulic binder foam including the steps of forming a slurry comprising a hydraulic binder, a foam stabilizing agent and water, conveying the slurry to a length of hose, and causing the slurry to foam. Thus, the method involves foaming a hydraulic slurry, which though difficult, results in the advantages touted in the instant specification.

Chao do not disclose or suggest foaming a hydraulic slurry. Instead, Chao teaches foaming a prefoam component of water and copolymeric foam stabilizer, and thoroughly mixing the resulting foam with a hydraulic slurry. A slurry comprising a hydraulic binder, foam stabilizing agent and water is not foamed as required by the instant claims.

SU '887 does not supply the deficiencies of Chao (an English translation of SU '887 is enclosed for the convenience of the Examiner). Specifically, SU '887 discloses a foam generator having nozzles for supplying a foaming agent and a dispersing agent, a mixing chamber and a screen.

The chamber for mixing and forming the foam contains vortex-forming elements. Compressed air and foaming agent enter the mixing chamber through respective nozzles and mix intensively as a result of their interaction with the vortex-forming elements. The foamed mixture then passes through a screen and is conveyed to another location where mortar is prepared.

Accordingly, SU '887 nowhere discloses or suggests foaming a slurry that includes hydraulic binder as required by the instant claims. Were one skilled in the art motivated to combine the teachings of SU '887 and Chao, at best the resulting combination would lead to the modification of the prefoam component of Chao - that is, the component devoid of the hydraulic substances. Indeed, the presence of the screen in the SU '887 foam generator device renders the device useless where particular materials, such as hydraulic binders, are involved. Nowhere do the combination of Chao and SU '887 teach the method of foaming a slurry comprising hydraulic binder, foam stabilizing agent and water as recited in the instant claims.

The arguments above apply as well to claims 7-11. Nebesnak, cited as teaching the equivalence of aluminum sulfate and calcium chloride, does not supply the above deficiencies of Chao and SU '887. Applicants also note that the skilled artisan would not use calcium chloride as an accelerator where spray application to a steel substrate is intended.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

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